

## Chemical and Polymer Physics Division Fachverband Chemische Physik und Polymerphysik (CPP)

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The 2026 Meeting of the CPP Division is marked by the 75th anniversary of the Polymer Physics Division, which is celebrated in the Focus Session “75 Years Division Polymer Physics: From Curiosity to Smart Materials”. Two Focus Sessions address the topics “Theoretical Modeling and Simulation of Biomolecular Condensates” and “Water: From Atmosphere to Space”. To honor the guest country France, we have organized the following French-German sessions: “Membranes and Porous Materials”, “Nanomaterials, Composites and Hybrids”, “Simulation Methods and Modeling of Soft Matter”, “2D Materials, Thin Films and Interfaces” as well as a Round Table Discussion “The Future of Neutrons in France and Germany”. Plenary speakers include Peter Müller-Buschbaum, Hugues Chaté, Antony Hyman, and Annabella Selloni. The former chairman of the CPP Division, Kurt Kremer, is this year’s awardee of the Max Planck Medal. The CPP Division supports the Symposia “The Sustainability Challenge: A Decade of Transformation” and “Fluids with Broken Time-Reversal Symmetry: Odd/Hall Viscosity between Active Matter and Electron Flows” as well as the French-German Symposium “Soft, Active and Alive: Emergent Properties in Living Matter”. The Meeting concludes with a Highlighted Invited Talk given by Jens-Uwe Sommer.

### Overview of Invited Talks and Sessions

(Lecture halls ZEU/LICH, ZEU/0255, ZEU/0260, and HÜL/S386; Poster P5)

#### Invited Talks

CPP 3.1	Mon	9:30–10:00	ZEU/LICH	<b>Theory and Modeling of Fluid Adsorption and Transport in Nanoporous Materials</b> — •BENOIT COASNE
CPP 4.1	Mon	9:30–10:00	ZEU/0255	<b>Exploration of Cathode Materials for Li-S Batteries</b> — •YAN LU
CPP 5.1	Mon	9:30–10:00	ZEU/0260	<b>Cleaning of dusty surfaces</b> — •DORIS VOLLMER, FRANZISKA SABATH, ABHINAV NAGA, STEFANIE KIRSCHNER, TARIK KARAKAYA, RÜDIGER BERGER, HANS-JÜRGEN BUTT, HALIM KUSUMAATMAJA
CPP 6.1	Mon	11:15–11:45	ZEU/LICH	<b>Hierarchical Porosity Meets Nanoconfined Water: Toward Water-Driven Functional Materials</b> — •PATRICK HUBER
CPP 9.1	Mon	15:00–15:30	ZEU/LICH	<b>Why Polymers Swell or Collapse: Molecular Insights into Cosolute Effects</b> — •NICO VAN DER VEGT
CPP 12.1	Mon	15:00–15:30	ZEU/0255	<b>Multifunctional films by tailoring chemistry and morphology of polymer brushes at the nanoscale</b> — •PETRA UHLMANN, ALEXANDER S. MÜNCH
CPP 12.6	Mon	16:30–17:00	ZEU/0255	<b>Thin-film and interface properties in energy conversion devices unveiled by X-rays</b> — •MARCUS BÄR
CPP 13.1	Mon	15:00–15:30	ZEU/0260	<b>Modelling and simulation of pH-sensitive polyelectrolyte microgels</b> — •STEFANIE SCHNEIDER
CPP 16.1	Mon	17:15–17:45	ZEU/0260	<b>Understanding the Passivation Properties of Solid Electrolyte Interphases (SEIs) in Batteries: Generator-Collector Experiments combined with a Transport and Reaction Model</b> — •BERNHARD ROLING, FALK KRAUSS, ANNALENA DUNCKER, ISABEL PANTENBURG
CPP 21.1	Tue	9:30–10:00	ZEU/0255	<b>Molecular modelling of gas solubility and free volume trends in Si-functionalized ionic liquids</b> — •KATERYNA GOLOVIZNINA, EDUARDO BAKIS, INÊS C. M. VAZ, AGILIO PADUA, MARGARIDA COSTA GOMES

CPP 22.1	Tue	9:30–10:00	ZEU/0260	<b>From Solution to Thin Films: Structure Formation Pathways in Organic Photovoltaic Films</b> — ●EVA M. HERZIG
CPP 26.1	Tue	14:00–14:30	HÜL/S386	<b>Investigating lignin graphitisation depending on botanical source and extraction method</b> — LUCIE DIEVAL, PHUTHIPHONG OUITRAKON, ROBERT HUNTER, SÉBASTIEN SCHAEFER, LOUIS HENNET, ERIK ELKAIM, JULIE RUELLOU, MILO S. P. SHAFFER, AGNIESZKA BRANDT-TALBOT, ●PASCALE LAUNOIS
CPP 30.1	Tue	14:00–14:30	ZEU/0260	<b>Solvent effects on amphiphile self-assembly in Deep Eutectic Solvents</b> — ●KAREN EDLER
CPP 31.1	Wed	9:30–10:00	ZEU/0255	<b>Hydrogels with a Pinch of Embodied Intelligence</b> — ●ANDREAS WALTHER
CPP 33.1	Wed	10:00–10:30	ZEU/LICH	<b>Shape-induced superstructure formation in concentrated ferrofluids</b> — ●SABRINA DISCH
CPP 37.1	Wed	15:00–15:30	ZEU/LICH	<b>Predicting molecular ordering in deposited molecular films</b> — ●DENIS ADRIENKO
CPP 38.1	Wed	15:00–15:30	ZEU/0255	<b>Engineering, processing and application of recombinant spider silk proteins</b> — ●THOMAS SCHEIBEL
CPP 39.1	Wed	15:00–15:30	ZEU/0260	<b>A polarizable model for atomistic simulations of metals and graphitic material/ liquid interfaces</b> — KRISHAN KANHAIYA, HENDRIK HEINZ, ●MARIALORE SULPIZI
CPP 42.1	Wed	17:00–17:30	ZEU/0260	<b>Mesopores filled with (poly)ionic liquids: phase transitions under confinement, and structure seen by SAXS and SANS</b> — ●JULIAN OBERDISSE, ANNE-CAROLINE GENIX
CPP 44.1	Thu	9:30–10:00	ZEU/LICH	<b>Shedding light on wide bandgap perovskites</b> — ●MICHAEL SALIBA
CPP 53.1	Fri	9:30–10:00	ZEU/LICH	<b>Limits and Prospects of Organic Solar Cells</b> — ●DIETER NEHER
CPP 54.1	Fri	9:30–10:00	ZEU/0255	<b>NMR-based molecular rheology and structural characterization of model gels</b> — ●KAY SAALWÄCHTER, BIDIT LAMSAL
CPP 56.1	Fri	10:45–11:15	HÜL/S386	<b>Liquid Dynamics at Interfaces</b> — ●MICHAEL VOGEL
CPP 61.1	Fri	13:15–14:00	HSZ/0002	<b>Biomolecular Condensates: Challenges for Polymer Physics</b> — ●JENS-UWE SOMMER

## Topical Talks

CPP 19.1	Tue	9:30–10:00	ZEU/LICH	<b>Surface adsorption and protonation equilibrium of atmospheric organics at the aqueous surface</b> — ●NØNNE PRISLE
CPP 27.1	Tue	14:00–14:30	ZEU/LICH	<b>Why water in plants survives negative pressure</b> — MARIN ŠAKO, EMANUEL SCHNECK, ROLAND NETZ, ●MATEJ KANDUČ
CPP 32.1	Wed	9:30–10:00	ZEU/0260	<b>Synchrotron X-Ray Studies on Structural Transitions in Water and Alcohol containing Ice Analogues</b> — ●CHRISTINA M. TONAUER
CPP 45.1	Thu	9:30–10:00	ZEU/0260	<b>Wetting transitions in biomolecular coacervates</b> — ●SUSANNE LIESE, TIEMEI LU, EVAN SPRUIJT, CHRISTOPH WEBER
CPP 51.1	Thu	15:15–15:45	ZEU/LICH	<b>The Loops of Life</b> — BRIAN CHAN, ●MICHAEL RUBINSTEIN
CPP 51.2	Thu	15:45–16:15	ZEU/LICH	<b>Polyelectrolytes and Biological Systems: A Charged Relationship</b> — ●MATTHIAS BALLAUFF
CPP 51.3	Thu	16:15–16:45	ZEU/LICH	<b>From block copolymer morphologies to functional polymer membranes</b> — ●VOLKER ABETZ
CPP 51.4	Thu	16:45–17:15	ZEU/LICH	<b>Molecular electronic materials and devices for solar energy conversion</b> — ●JENNY NELSON
CPP 51.5	Thu	17:15–17:45	ZEU/LICH	<b>Control of cell and tissue stiffness by biopolymer networks and particle inclusions</b> — ●PAUL JANMEY
CPP 55.1	Fri	9:30–10:00	ZEU/0260	<b>Data-driven modelling of phase-separating intrinsically disordered regions</b> — ●GIULIO TESEI, FATIMA KAMAL ZAIDI, SHANLONG LI, JULIAN O. STREIT, JIANHAN CHEN, TANJA MITTAG, KRESTEN LINDORFF-LARSEN

**Discussion on Sustainability on Monday during Lunch Break**

PSV I Mon 13:00–13:45 HSZ/AUDI **Sustainability! And now? – Opportunities for young researchers —**  
 •ROXANA SCHARPEGGE, HIROKI SAYAMA, THOMAS SCHUBATZKY, BIRTE  
 HÖCKER, UWE RIEDEL, JOHN PLANE, PAULEO NIMTZ, STEFANIE FALK

### Invited Talks of the joint Symposium SKM Dissertation Prize 2026 (SYSD)

See SYSD for the full program of the symposium.

SYSD 1.1	Mon	9:30–10:00	HSZ/0002	<b>Stochastic-Calculus Approach to Non-equilibrium Statistical Physics —</b> •CAI DIEBALL
SYSD 1.2	Mon	10:00–10:30	HSZ/0002	<b>Nonuniform magnetic spin textures for sensing, storage and computing applications —</b> •SABRI KORALTAN
SYSD 1.3	Mon	10:30–11:00	HSZ/0002	<b>Anomalous Quantum Oscillations beyond Onsager’s Fermi Surface Paradigm —</b> •VALENTIN LEEB
SYSD 1.4	Mon	11:00–11:30	HSZ/0002	<b>Coherent Control Schemes for Semiconductor Quantum Systems —</b> •EVA SCHÖLL
SYSD 1.5	Mon	11:30–12:00	HSZ/0002	<b>On stochastic thermodynamics under incomplete information: Thermodynamic inference from Markovian events —</b> •JANN VAN DER MEER

### Invited Talks of the joint Symposium The Sustainability Challenge: A Decade of Transformation (SYSC)

See SYSC for the full program of the symposium.

SYSC 1.1	Mon	15:00–15:30	HSZ/AUDI	<b>Open-Endedness and Community-Based Approaches to Sustainability Challenges —</b> •HIROKI SAYAMA
SYSC 1.2	Mon	15:30–16:00	HSZ/AUDI	<b>Education as a Social Tipping Element: Evidence from Climate and Physics Education Research —</b> •THOMAS SCHUBATZKY
SYSC 1.3	Mon	16:00–16:30	HSZ/AUDI	<b>Mechanistic and Material Perspectives on Enzymatic Hydrolysis of Semicrystalline Polyesters —</b> •BIRTE HÖCKER
SYSC 1.4	Mon	16:45–17:15	HSZ/AUDI	<b>Decarbonization Options for Industry —</b> •UWE RIEDEL
SYSC 1.5	Mon	17:15–17:45	HSZ/AUDI	<b>Impacts of Cosmic Dust and Space Debris in the Terrestrial Atmosphere —</b> •JOHN PLANE

### Invited Talks of the joint Symposium Fluids with Broken Time-Reversal Symmetry: Odd/Hall Viscosity between Active Matter and Electron Flows (SYBS)

See SYBS for the full program of the symposium.

SYBS 1.1	Tue	9:30–10:00	HSZ/AUDI	<b>Odd viscosity in three-dimensional fluids: flows, wakes, and eddies —</b> •TALI KHAIN
SYBS 1.2	Tue	10:00–10:30	HSZ/AUDI	<b>Odd viscosity in two-dimensional hydrodynamic electron transport —</b> •IGOR GORNYI, DMITRY POLYAKOV
SYBS 1.3	Tue	10:30–11:00	HSZ/AUDI	<b>Odd slip on chiral active surfaces —</b> •ANDREJ VILFAN, YUTO HOSAKA
SYBS 1.4	Tue	11:15–11:30	HSZ/AUDI	<b>Parity-odd transport in electron fluids —</b> •JOHANNA ERDMENGER
SYBS 1.5	Tue	11:30–11:45	HSZ/AUDI	<b>Curved Odd Elasticity —</b> LAZAROS TSALOUKIDIS, YUAN ZHOU, JACK BINYSH, NIKTA FAKHRI, CORENTIN COULAIS, •PIOTR SURÓWKA

### Invited Talks of the joint Symposium France: Soft, Active and Alive: Emergent Properties in Living Matter (SYGF)

See SYGF for the full program of the symposium.

SYGF 1.1	Wed	15:00–15:30	HSZ/AUDI	<b>Liquid crystal geometries in type I collagen-based tissues —</b> •NADINE NASSIF
SYGF 1.2	Wed	15:30–16:00	HSZ/AUDI	<b>Self-organization of the cytoplasm by physical instabilities —</b> •JAN BRUGUES
SYGF 1.3	Wed	16:00–16:30	HSZ/AUDI	<b>From morphogenesis to space partitioning by microtubules and molecular motors. —</b> •MANUEL THERY

SYGF 1.4	Wed	16:45–17:15	HSZ/AUDI	<b>More than the sum: how composite interfaces govern function</b> — ●ALBA DIZ-MUÑOZ
SYGF 1.5	Wed	17:15–17:45	HSZ/AUDI	<b>Swimming and Swarming of Intelligent Active Particles</b> — SEGUN GOH, PRIYANKA IYER, RAJENDRA SINGH NEGI, ●GERHARD GOMPPER
SYGF 1.6	Wed	17:45–18:15	HSZ/AUDI	<b>Perturbing the collective motion of fish with challenging environments</b> — ●AURÉLIE DUPONT

## Sessions

CPP 1.1–1.11	Mon	9:30–12:45	BAR/SCHÖ	<b>Active Matter I (joint session BP/CPP/DY)</b>
CPP 2.1–2.4	Mon	9:30–10:30	MER/0002	<b>Sustainability: Challenges and Solutions (joint session UP/CPP/SOE)</b>
CPP 3.1–3.5	Mon	9:30–11:00	ZEU/LICH	<b>French-German Session: Membranes and Porous Materials I</b>
CPP 4.1–4.6	Mon	9:30–11:15	ZEU/0255	<b>Energy Storage Materials and Devices I</b>
CPP 5.1–5.5	Mon	9:30–11:00	ZEU/0260	<b>Wetting, Fluidics and Liquids at Interfaces and Surfaces I (joint session CPP/DY)</b>
CPP 6.1–6.5	Mon	11:15–12:45	ZEU/LICH	<b>French-German Session: Membranes and Porous Materials II</b>
CPP 7.1–7.5	Mon	11:30–12:45	ZEU/0255	<b>Emerging Topics in Chemical and Polymer Physics, New Instruments and Methods I</b>
CPP 8.1–8.5	Mon	11:30–12:45	ZEU/0260	<b>Wetting, Fluidics and Liquids at Interfaces and Surfaces II (joint session CPP/DY)</b>
CPP 9.1–9.7	Mon	15:00–17:00	ZEU/LICH	<b>French-German Session: Simulation Methods and Modeling of Soft Matter I</b>
CPP 10.1–10.13	Mon	15:00–18:30	ZEU/0118	<b>Droplets, Wetting, and Microfluidics (joint session DY/CPP)</b>
CPP 11.1–11.12	Mon	15:00–18:30	ZEU/0160	<b>Active Matter II (joint session DY/BP/CPP)</b>
CPP 12.1–12.6	Mon	15:00–17:00	ZEU/0255	<b>French-German Session: 2D Materials, Thin Films and Interfaces I</b>
CPP 13.1–13.7	Mon	15:00–17:00	ZEU/0260	<b>Charged Soft Matter, Polyelectrolytes and Ionic Liquids</b>
CPP 14.1–14.7	Mon	17:15–19:00	ZEU/LICH	<b>French-German Session: Simulation Methods and Modeling of Soft Matter II</b>
CPP 15.1–15.7	Mon	17:15–19:00	ZEU/0255	<b>Emerging Topics in Chemical and Polymer Physics, New Instruments and Methods II</b>
CPP 16.1–16.6	Mon	17:15–19:00	ZEU/0260	<b>Energy Storage Materials and Devices II</b>
CPP 17.1–17.51	Mon	19:00–21:00	P5	<b>Poster I</b>
CPP 18.1–18.12	Tue	9:30–12:45	BAR/SCHÖ	<b>Active Matter III (joint session BP/CPP/DY)</b>
CPP 19.1–19.5	Tue	9:30–11:00	ZEU/LICH	<b>Focus Session: Water – from Atmosphere to Space I (joint session CPP/DY)</b>
CPP 20.1–20.12	Tue	9:30–12:45	ZEU/0160	<b>Complex Fluids and Soft Matter (joint session DY/CPP)</b>
CPP 21.1–21.6	Tue	9:30–11:15	ZEU/0255	<b>French-German Session: Simulation Methods and Modeling of Soft Matter III</b>
CPP 22.1–22.6	Tue	9:30–11:15	ZEU/0260	<b>Hybrid, Organic and Perovskite Optoelectronics and Photovoltaics I</b>
CPP 23.1–23.6	Tue	11:15–12:45	ZEU/LICH	<b>Focus Session: Water – from Atmosphere to Space II (joint session CPP/DY)</b>
CPP 24.1–24.5	Tue	11:30–12:45	ZEU/0255	<b>French-German Session: Simulation Methods and Modeling of Soft Matter IV</b>
CPP 25.1–25.5	Tue	11:30–12:45	ZEU/0260	<b>Hybrid, Organic and Perovskite Optoelectronics and Photovoltaics II</b>
CPP 26.1–26.5	Tue	14:00–15:30	HÜL/S386	<b>French-German Session: 2D Materials, Thin Films and Interfaces II</b>
CPP 27.1–27.5	Tue	14:00–15:30	ZEU/LICH	<b>Focus Session: Water – from Atmosphere to Space III (joint session CPP/DY)</b>
CPP 28.1–28.5	Tue	14:00–15:30	ZEU/0160	<b>Active Matter IV (joint session DY/BP/CPP)</b>
CPP 29.1–29.6	Tue	14:00–15:30	ZEU/0255	<b>Emerging Topics in Chemical and Polymer Physics, New Instruments and Methods III</b>
CPP 30.1–30.5	Tue	14:00–15:30	ZEU/0260	<b>Complex Fluids, Colloids, Micelles and Vesicles I</b>
CPP 31.1–31.7	Wed	9:30–11:30	ZEU/0255	<b>Responsive and Adaptive Systems</b>

CPP 32.1–32.4	Wed	9:30–10:45	ZEU/0260	<b>Focus Session: Water – from Atmosphere to Space IV</b> (joint session CPP/DY)
CPP 33.1–33.4	Wed	10:00–11:15	ZEU/LICH	<b>Complex Fluids, Colloids, Micelles and Vesicles II</b>
CPP 34.1–34.4	Wed	11:00–12:00	ZEU/0260	<b>Focus Session: Water – from Atmosphere to Space V</b> (joint session CPP/DY)
CPP 35.1–35.5	Wed	11:15–12:45	ZEU/0118	<b>Glasses and Glass Transition</b> (joint session DY/CPP)
CPP 36.1–36.1	Wed	11:45–12:45	ZEU/LICH	<b>Round Table Discussion: The Future of Neutrons in France and Germany</b> (joint session CPP/BP)
CPP 37.1–37.6	Wed	15:00–16:45	ZEU/LICH	<b>Hybrid, Organic and Perovskite Optoelectronics and Photovoltaics III</b>
CPP 38.1–38.6	Wed	15:00–16:45	ZEU/0255	<b>Biopolymers, Biomaterials and Bioinspired Functional Materials I</b> (joint session CPP/BP)
CPP 39.1–39.6	Wed	15:00–16:45	ZEU/0260	<b>French-German Session: Nanomaterials, Composites and Hybrids I</b>
CPP 40.1–40.6	Wed	17:00–18:30	ZEU/LICH	<b>Hybrid, Organic and Perovskite Optoelectronics and Photovoltaics IV</b>
CPP 41.1–41.7	Wed	17:00–18:45	ZEU/0255	<b>Biopolymers, Biomaterials and Bioinspired Functional Materials II</b> (joint session CPP/BP)
CPP 42.1–42.6	Wed	17:00–18:45	ZEU/0260	<b>French-German Session: Nanomaterials, Composites and Hybrids II</b>
CPP 43.1–43.11	Thu	9:30–12:45	BAR/SCHÖ	<b>Biomaterials and Biopolymers</b> (joint session BP/CPP)
CPP 44.1–44.6	Thu	9:30–11:15	ZEU/LICH	<b>Hybrid, Organic and Perovskite Optoelectronics and Photovoltaics V</b>
CPP 45.1–45.6	Thu	9:30–11:15	ZEU/0260	<b>Focus Session: Theoretical Modeling and Simulation of Biomolecular Condensates I</b> (joint session CPP/BP)
CPP 46.1–46.66	Thu	9:30–11:30	P5	<b>Poster II</b>
CPP 47.1–47.7	Thu	10:15–12:45	BAR/0106	<b>Focus Session: Controlling Microparticles and Biological Cells by Ultrasound</b> (joint session BP/CPP/DY)
CPP 48.1–48.5	Thu	11:30–12:45	ZEU/LICH	<b>Hybrid, Organic and Perovskite Optoelectronics and Photovoltaics VI</b>
CPP 49.1–49.5	Thu	11:30–12:45	ZEU/0255	<b>Gels, Polymer Networks and Elastomers I</b>
CPP 50.1–50.5	Thu	11:30–12:45	ZEU/0260	<b>Focus Session: Theoretical Modeling and Simulation of Biomolecular Condensates II</b> (joint session CPP/BP)
CPP 51.1–51.5	Thu	15:15–17:45	ZEU/LICH	<b>Focus Session: 75 Years Polymer Physics Division: From Curiosity to Smart Materials</b> (joint session CPP/BP)
CPP 52	Thu	18:00–19:00	ZEU/LICH	<b>Members' Assembly</b>
CPP 53.1–53.6	Fri	9:30–11:15	ZEU/LICH	<b>Hybrid, Organic and Perovskite Optoelectronics and Photovoltaics VII</b>
CPP 54.1–54.6	Fri	9:30–11:15	ZEU/0255	<b>Gels, Polymer Networks and Elastomers II</b>
CPP 55.1–55.6	Fri	9:30–11:15	ZEU/0260	<b>Focus Session: Theoretical Modeling and Simulation of Biomolecular Condensates III</b> (joint session CPP/BP)
CPP 56.1–56.4	Fri	10:45–12:00	HÜL/S386	<b>Molecular and Polymer Dynamics, Friction and Rheology I</b>
CPP 57.1–57.6	Fri	11:30–13:00	ZEU/LICH	<b>Hybrid, Organic and Perovskite Optoelectronics and Photovoltaics VIII</b>
CPP 58.1–58.6	Fri	11:30–13:00	ZEU/0255	<b>Gels, Polymer Networks and Elastomers III</b>
CPP 59.1–59.6	Fri	11:30–13:00	ZEU/0260	<b>Crystallization</b>
CPP 60.1–60.3	Fri	12:15–13:00	HÜL/S386	<b>Molecular and Polymer Dynamics, Friction and Rheology II</b>
CPP 61.1–61.1	Fri	13:15–14:00	HSZ/0002	<b>Closing Talk</b> (joint session CPP/BP/DY)

## Members' Assembly of the Chemical and Polymer Physics Division

Thursday 18:00–19:00 Raum ZEU/LICH

- Report of the current speakers
- Election of the second deputy speaker
- Award of the poster prize of the CPP Division
- Miscellaneous